

Methods: A total of 292 ESBL or AmpC -producing *Escherichia coli* clinical isolates were collected from five children's hospitals from 2005 to 2006. The MICs of 9 antimicrobial agents were determined by agar dilution. *qnrA*, *qnrB*, *qnrS*, *aac(6')-Ib-cr*, *qepA* genes and ESBL or AmpC -encoding genes were detected by PCR. Conjugation was used to confirm whether PMQR genes and ESBL or AmpC -encoding genes were transferred together. PFGE was used to investigate the clonality of PMQR-positive isolates.

Results: *qnrA*-, *qnrB*- and *qnrS*-type genes were detected in 3 (1.0%), 3 (1.0%) and 6 (2.1%) of the isolates, respectively. A total of 24 (8.2%) isolates were found positive for *aac(6')-Ib*, of which 10 (3.5% of 292) had the -*cr* variant. There was no isolates positive for *qepA*. The resistance rate against ciprofloxacin was 55%. In 10 *aac(6')-Ib-cr* isolates, 9 were co-produced CTX-M-14, and 1 co-produced CTX-M-15. Conjugation revealed that PMQR genes and *bla* genes were transferred together.

Conclusions: A low *qnr* genes carriage rate were found in those strains. However, there was a closed relationship between PMQR genes and β -lactamase genes, as well as a high resistance rate against ciprofloxacin.

PP-161 CD4⁺CD25⁺ regulatory T cells suppress immune response to murine cytomegalovirus infection of mouse embryo fibroblasts

Ya-nan Li*, Feng Fang, Yu-feng Zhou, Sai-nan Shu, Dan-dan Zhu, Zhufeng Yang. Department of Pediatrics, Tongji Hospital, Tongji Medical College, Huazhong University of Science and Technology, China

Background: To explore the effect of Tregs on MCMV infection, and its possible mechanism.

Methods: A co-culture system of T cells and MCMV infected MEFs in the presence/absence of Tregs was established. the ratios of T cell subsets were analyzed by flow cytometry; the production of IFN- γ and IL-4 in supernatants was detected with double-antibody sandwich ELISA; the viral load of whole culture was quantified by plaque assay. The levels of TGF- β 1 mRNA were determined by RT-PCR assay. The effects of TGF- β 1 and IL-10 on Foxp3 protein expression and Treg ratio were determined by Western blot and flow cytometry, respectively.

Results: After co-culture for 3 days, the Treg ratio and Foxp3 mRNA level were both higher than those of pre-co-culture. Addition of Tregs to the co-culture systems significantly increased the viral loads in a dose-dependent manner. In the absence of Tregs, after co-culture of T_{depTreg} with MEF_{MCMV} for 3 days, MCMV dramatically promoted effector T cell subsets proliferation. When homologous Tregs were added into the co-cultures, the numbers of Tc1, Tc2 and Th1 were suppressed with correlated with increased ratio for Tregs. And the levels of IL-10 and TGF- β 1 increased accordingly. Blockade of TGF- β 1 partly reduced the Foxp3 protein level and Treg ratio.

Conclusions: MCMV infection could induce Treg expansion *in vitro*, and Treg might suppress effector T cell subgroups's differentiation and functions with secreting IL-10 and TGF- β 1.

PP-162 The characteristic of T cell subsets of hand, foot and mouth disease in part of Shandong in 2008

Xia Liu*, Le-hai Zhang. Qilu Children's Hospital of Shandong University

Objective: To approach the value of T cell subsets of hand, foot and mouth disease (HFMD) in judgement pathogenetic condition and evaluation curative effect by analyzing the characteristic of T cell subsets of HFMD in part of Shandong in 2008.

Method: 140 cases of HFMD patients and 166 normal children for register in nursery anti-coagulate blood were collected. T lymphocyte subsets were detected by flowcytometry. It was compared with different age group of the characteristic of T

cell subsets of HFMD, and analyzed the change of T lymphocyte subsets of patients with serious brainstem encephalitis.

Results: Compared with those of normal children, CD₃⁺, CD₄⁺ and CD₈⁺ T cell opposite percentage of HFMD patients decreased obviously. Both CD₃⁺ and CD₄⁺ T cell of different age group of patients also lessened notably ($P < 0.01$), and the amounts of CD₈⁺ T cell were not decreased markedly ($P > 0.05$), except for the age group from 1 year 7 months to 2 years ($P < 0.05$). CD₃⁺ T cells, CD₄⁺ T cells, and CD₈⁺ T cells were depleted in patients with encephalitis, and the amounts of T8 cells decreased markedly. The opposite percentage T lymphocyte in patients with serious brainstem encephalitis was lower than without encephalitis.

Conclusion: T lymphocyte of HFMD were more seriously damaged than normal children. And the amount of T lymphocytic subsets were lower in HFMD with encephalitis than those patients without encephalitis. And T lymphocytic subsets can be seen a adjunctive index for judgement pathogenetic condition and evaluation curative effect in HFMD.

PP-163 UTIs; microbial spectrum and antibiotics among Southeast Asian children

Tabish Hussain^{*1,2}, Abbas Hayat², Li Yushu¹, Majid Ahmad³. ¹Union Hospital, Tongji Medical College, Huazhong University of Sciences and Technology, Wuhan, China; ²Rawalpindi General Hospital, Rawalpindi, Pakistan; ³Hubei College of Traditional Chinese Medicine, Wuhan

Background: Urinary tract infections (UTIs) are the most common bacterial infections of childhood, accounting up to 1% among infants to 10% among teenagers. Throughout childhood, the risk is nearly 2% for boys and 8% for girls. UTIs account for more than 1 million visits to pediatricians' offices every year. The study aim was to determine the spectrum of microorganisms and their sensitivities among children with UTIs.

Methods: Study was conducted at Holy-Family Hospital, Rawalpindi, Pakistan from January 2007 to December 2008. 100 children with fever for more than 1 week or less without any definite focus of infection were included. 66% were males. Mean age 5 \pm 4.3 years. Children already received antibiotics in previous 2 days, comatose, immunocompromised or with congenital urinary tract abnormalities were excluded. Non-invasive method of urine collection pads was used. Dipstick test was used to diagnose UTI among Children aged >3 years while a sample was sent for urgent microscopy and culture among children aged >3 months but <3 years. Results were awaited before starting treatment, unless they were very systemically unwell.

Results: *Escherichia coli* (37.6%) and *Klebsiella* (31.4%) were the most common. Others were *Proteus mirabilis* (8.8%), *Enterobacter* (7.9%) and *Staphylococcus aureus* (5.3%). Maximum sensitivity was to co-amoxiclav (55%), cephalosporins (40%) aminoglycosides (36%) and quinolones (22%). Organisms showed maximum resistance to ampicillin, amoxicillin and nalidixic acid.

Conclusion: UTI is a common source of infection among children presenting with unexplained fever. Coamoxiclav/Trimethoprim/Sulfa DS BIDx3 days or cephalosporins can be started as an empirical agent that can be changed later according to the culture and sensitivity report usually Ciprofloxacin 250mg BIDx3 days, Levofloxacin 250mg daily x3 days or Amoxicillin 500TID x7 days as second line drugs.